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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WILLIAMS, THOMAS J

ART UNIT PAPER NUMBER

3683

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,892

Applicant(s)

DE FONTENAY ET AL.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Acknowledgment is made in the receipt of the information disclosure statement filed April 15, 2004, the priority papers filed June 14, 2004 and the oath filed December 15, 2004.

Claim Objections

2. Claim 3 is objected to because of the following informalities: lines 2-3, "said first reinforcement" should be changed to "said internal reinforcement". Appropriate correction is required.

3. Claim 16 is objected to because of the following informalities: line 3, "said pieces" does not clearly distinguish what piece that the external portion abuts against, the applicant should merely clearly define what piece abuts against the external portion. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,273,406 to Miyamoto et al.

Re-claim 1, Miyamoto et al. discloses in figure 25 a hydroelastic joint, comprising: an external reinforcement 117, an internal reinforcement 111, an assembly forming a hydroelastic

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spring disposed between the reinforcements, the assembly comprises a first 115 and second 113 elastically deformable element, a sealed damping chamber 118, the second elastic element has longitudinal dimension less than the first elastic element.

Re-claim 2, see figures.

Re-claim 3, the intermediate member 112 is provided with a bulge section located in the center area, the internal (or first) reinforcement has a bulge section.

Re-claim 4, a peripheral reinforcement element 116 is disposed in the end walls of the chamber.

Re-claim 5, the assembly is pressed into the external reinforcement.

Re-claim 15, the internal reinforcement 111 is provided with enlarged end sections, see figure 25.

Re-claim 16, flange sections b and c are interpreted as external portions.

Re-claims 17 and 18, it is known in the art to use hydroelastic joints, such as those disclosed by Miyamoto et al., with axles having the recited structure, as noted by the applicant see page 3 paragraphs 6 and 7 of the instant application.

6. Claims 1-6, 8, 9, 14, and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,622,996 to Mayerbock et al.

Re-claim 1, Mayerbock et al. discloses a hydroelastic joint, comprising: an external reinforcement 2, an internal reinforcement 3, an assembly forming a hydroelastic spring disposed between the reinforcements, the assembly comprises a first 4 and second 5 elastically deformable element, a sealed damping chamber 12/13, the second elastic element has longitudinal dimension less than the first elastic element.

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Re-claim 2, see figures.

Re-claim 3, the intermediate member 1 is provided with a bulge section located in the center area, the internal (or first) reinforcement has a bulge section.

Re-claim 4, a peripheral reinforcement element is disposed in the end walls.

Re-claim 5, the assembly is pressed into the external reinforcement.

Re-claim 6, the joint is provided with communication channels 14.

Re-claim 8, the joint is provided with two stop elements, interpreted either as the bulge element is chamber 12 and 13 or the wall section of elastic element 4 (this is consistent with the instant application, in which the wall section defining the chambers acts as the stop, see figures 1 and 2).

Re-claim 9, the wall sections of Mayerbock et al. are pretensioned.

Re-claim 14, see column 3 lines 15-19.

Re-claim 16, flange sections of element 2 are interpreted as external portions that abut against pieces of the assembly.

Re-claims 17 and 18, it is known in the art to use hydroelastic joints, such as those disclosed by Miyamoto et al., with axles having the recited structure, as noted by the applicant see page 3 paragraphs 6 and 7 of the instant application.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of US 5,516,083 to Sprang et al.

Re-claims 6 and 7, Miyamoto et al. fails to teach the chambers connected by a communication means having one way valve lips. Sprang et al. teaches a hydroelastic joint having a plurality of chambers communicating with each other via a communication path having one way valve lips 8 in addition to normal open communication pathways. These pathways are opened during periods of increased internal pressure within the chambers, thus providing additional fine tuning of the dynamic properties for the spring or hydroelastic joint, see column 3 lines 1-9. It would have been obvious to one of ordinary skill in the art to have provided the joint of Miyamoto et al. with communication means having one way valves opening at predetermined pressures between the fluid chambers as taught by Sprang et al., thus increasing the range of damping for the joint.

Re-claims 8 and 9, the joint is provided with two wall sections, that are pretensioned and thus act as stop elements, defining the fluid chambers (this is consistent with the instant application, in which the wall section defining the chambers acts as the stop, see figures 1 and 2).

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10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mayerbock et al. in view of Sprang et al.

Re-claim 7, Mayerbock et al. fails to teach the chambers connected by a communication means having one way valve lips. Sprang et al. teaches a hydroelastic joint having a plurality of chambers communicating with each other via a communication path having one way valve lips in addition to normal open communication pathways. These pathways are opened during periods of increased internal pressure within the chambers, thus providing additional fine tuning of the dynamic properties for the spring or hydroelastic joint, see column 3 lines 1-9. It would have been obvious to one of ordinary skill in the art to have provided the joint of Mayerbock et al. with communication means having one way valves opening at predetermined pressures between the fluid chambers as taught by Sprang et al., thus increasing the range of damping for the joint.

Allowable Subject Matter

11. Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vossel et al. and Tatura et al. each teach hydroelastic joints having a first and second deformable elastic elements.

13. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346 (after April 2005 the new telephone number will be 571-272-7128). The examiner can normally

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be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668 (after April 11, 2005 the new telephone number will be 571-272-7099). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

March 2, 2005

THOMAS WILLIAMS
PATENT EXAMINER

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3-2-05

Thomas Williams